

**Notice of Allowability**

Application No.

09/864,291

Examiner

Chih-Min Kam

Applicant(s)

OKO ET AL.

Art Unit

1653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/4/05.
2. ☒ The allowed claim(s) is/are 8-10,13,15,48,53,60-62,65-67,73-83,86 and 88-93.
3. ☒ The drawings filed on 09 October 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>20050421</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                                    |
|   | 9. <input type="checkbox"/> Other _____  |

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An **Examiner's Amendment** to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Nicholas Seay on April 25, 2005.

**Examiner's Amendments to the Specification:**

Please replace the term "Fig. 2 is" at page 16, line 1 of the paragraph [0041] with the term "Figs. 2A and 2B are".

**Examiner's Amendments to the Claims:**

Cancel claims 11, 12, 14, 84, 85 and 87.

Claims 8, 9, 15, 48, 53, 61, 62, 83 and 89 have been amended as follows:

8. (Currently amended) The isolated polynucleotide of claim 73, wherein the encoded polypeptide comprises;

(a) at least one of (i) the sequence PPPGY (SEQ ID NO:1) and (ii) the sequence LPPAY (SEQ ID NO:2), and

(b) at least three domains, each domain comprising the sequence YGXPPXG (SEQ ID NO:3), wherein Y represents a Tyrosine residue, G represents a Glycine residue, L represents a Leucine residue, A represents an Alanine residue, X represents any amino acid residue, and P represents a Proline residue.

9. (Currently amended) The isolated polynucleotide of claim 73, wherein the encoded polypeptide comprises the sequence of SEQ ID NO:5.

15. (Currently amended) A method of producing a polypeptide, the method comprising maintaining the host cell of claim 14 93 under conditions such that the polypeptide is expressed, then collecting the polypeptide.
48. (Currently amended) The isolated polynucleotide of claim 73, wherein the encoded polypeptide comprises the sequence of SEQ ID NO:12.
53. (Currently amended) The isolated polynucleotide of claim 73 wherein the encoded polypeptide comprises
- (a) the sequence PPXY (SEQ ID NO:8), and
  - (b) at least three domains, each domain comprising the sequence YGXPPXG (SEQ ID NO:3), wherein Y represents a Tyrosine residue, G represents a Glycine residue, X represents any amino acid residue, and P represents a Proline residue.
61. (Currently amended) An isolated polynucleotide comprising a sequence that is at least 75% identical to nucleotides 36 to 975 of SEQ ID NO: 4 as determined using BLASTN 2.1.2 matrix; blastn matrix; 1 -3; gap penalties: existence=5, extension=2, wherein a polypeptide encoded by the polynucleotide induces mammalian oocyte activation, and wherein the encoded polypeptide comprises;
- (a) at least one of (i) the sequence PPPGY (SEQ ID NO:1) and (ii) the sequence LPPAY (SEQ ID NO:2), and
  - (b) at least three domains, each domain comprising the sequence YGXPPXG (SEQ ID NO:3), wherein Y represents a Tyrosine residue, G represents a Glycine residue, L represents a Leucine residue, A represents an Alanine residue, X represents any amino acid residue, and P represents a Proline residue.

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62. (Currently amended) An isolated polynucleotide comprising a sequence that is at least 75% identical to nucleotides 1 to 705 of SEQ ID NO: 11 as determined using BLASTN 2.1.2 matrix; blastn matrix; 1 -3; gap penalties: existence=5, extension=2, wherein a polypeptide encoded by the polynucleotide induces mammalian oocyte activation, and wherein the encoded polypeptide comprises;

(a) at least one of (i) the sequence PPPGY (SEQ ID NO:1) and (ii) the sequence LPPAY (SEQ ID NO:2), and

(b) at least three domains, each domain comprising the sequence YGXPPXG (SEQ ID NO:3), wherein Y represents a Tyrosine residue, G represents a Glycine residue, L represents a Leucine residue, A represents an Alanine residue, X represents any amino acid residue, and P represents a Proline residue.

83. (Currently amended) The isolated polynucleotide of claim 82, wherein the encoded polypeptide comprises;

(~~b~~a) at least one of (i) the sequence PPPGY (SEQ ID NO:1) and (ii) the sequence LPPAY (SEQ ID NO:2), and

(b) at least three domains, each domain comprising the sequence YGXPPXG (SEQ ID NO:3), wherein Y represents a Tyrosine residue, G represents a Glycine residue, L represents a Leucine residue, A represents an Alanine residue, X represents any amino acid residue, and P represents a Proline residue.

89. (Currently amended) A method of producing a polypeptide, the method comprising maintaining the host cell of claim 87 ~~88~~ under conditions such that the polypeptide is expressed, then collecting the polypeptide.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached at 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chih-Min Kam, Ph. D. *CMK*  
Patent Examiner

CMK

April 25, 2005



**KAREN COCHRANE CARLSON, PH.D**  
**PRIMARY EXAMINER**